

## **Method and Apparatus for Etch Endpoint Detection**

### **ABSTRACT OF THE DISCLOSURE**

Broadly speaking, an invention is provided for monitoring a plasma optical emission. More specifically, the present invention provides a method for monitoring the plasma optical emission through a variable aperture to detect an endpoint of a plasma etching process without interferences that could lead to false endpoint calls. The method includes collecting optical emission data from a plasma through an aperture defined by moveable members. The moveable members are capable of varying a configuration of the aperture. The method also includes holding the moveable members at a particular time to cause the aperture to maintain a fixed configuration. The method further includes detecting a specific perturbation in the plasma optical emission while holding the moveable members.